



# UNITED STATES PATENT AND TRADEMARK OFFICE

11A

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,178	03/23/2004	Makoto Toyota	P24997.US0412.dc	2011
7055	7590	11/16/2006	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			A, MINH D	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 11/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/806,178

Applicant(s)

TOYOTA ET AL.

Examiner

Minh D. A

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 4-9 and 13-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-9 and 13-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

Applicant's communication filed on 8/31/06 has been carefully considered by the examiner. The arguments advanced therein are persuasive with respect to the rejection of record, and those rejection are accordingly withdrawn. In view of a further consideration, however, a new rejection is set forth below. This action is not made final.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 4-9 and 13-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Dygert (US 6, 864, 641).

Regarding claim 4, Dygert discloses, figures 3-4, a method and apparatus for controlling light emitting diodes comprising: a power source device (DC and DC/DC converter) comprising a current controller (booster and current regulating circuit (104)), and an illumination head (102), connected to the power source device, and comprising (boost regulator (304)) that detects current flowing through a power supply circuit, at least one light emitting device(102) being connected to the power supply circuit in the illumination head, wherein a resistance value of the current detection resistor (R20-R22)

is selected so as to cause a voltage drop equal to a predetermined reference potential when a rated current is supplied to each light emitting device, and the current controller controls (amplifier) the supplied current such that a potential for the voltage drop caused in the current detection resistor (R19-R22) are equal to the predetermined reference potential and constant voltage (see amplifier(39) having constant voltage source)(Vr) is output from the current detection resistor for each of a plurality of illumination heads with different rated current. See figures 1-4, col.3, lines 12-67 to col.5, lines 1-67.

Regarding claim 5, Dygert discloses at least one light emitting device (102) connected to a power supply circuit' and a current detection resistor that detects a current flowing in the power supply circuit, a resistance value of the current detection resistor being selected so as to cause a voltage drop equal to a predetermined reference potential when a rated current is supplied to each light emitting device, a constant voltage source)(Vr) is output from the current detection resistor for each of a plurality of illumination heads with different rated current. See figures 1-4, col.3, lines 12-67 to col.5, lines 1-67.

Regarding claim 6, Dygert discloses, figures 1-4, a power source device that supplies power to an illumination head, comprising'. a current controller', wherein the illumination head includes a current detection resistor that detects a current flowing to a power supply circuit in which at least one light emitting device is connected, a resistance value of the current detection resistor being selected so as to cause a voltage drop equal to a predetermined reference potential when a rated current is supplied to each light emitting device, and wherein the current controller is disposed

Art Unit: 2821

such that a potential of the voltage drop caused in the current detection resistor is equal to the predetermined reference potential when the illuminating head is connected to the power source device and a constant voltage source is output from the current detection resistor for each of a plurality of illumination heads with different rated current. See figures 1-4, col.3, lines 12-67 to col.6, lines 1-67.

Regarding claims 7-9, Dygest discloses a supplied current is controlled to be a rated current of the illumination head when the illumination head is connected to the power source device. See figures 1-4.

Regarding claims 13-15, Dygest discloses a table on col.7, lines 1-26, wherein a constant voltage is output from the current detection resistor for each of a plurality of illumination heads with different rated currents.

#### ***Citation of relevant prior art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure Haller (US 6,485,112) and Okawa et al (US 6,157,160) are cited to show a lighting control system.

#### ***Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu A whose telephone number is (571) 272-1817. The examiner can normally be reached on M-F (5:30 AM-2:45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is

Art Unit: 2821

assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner

Minh A

Art Unit 2821

11/07/06

*Shih-Chao Chen*  
SHIH-CHAO CHEN  
PRIMARY EXAMINER